

IN THE CLAIMS

Kindly amend the claims as shown in the following complete listing of all claims:

1. (currently amended) A web inspection method comprising:
projecting light from a source to be incident on a select portion of a web that is moving in a down-web direction and that extends laterally to define a width in a cross-web direction, wherein said select portion of said web comprises an unsupported free-span portion of said web that extends and is moving between first and second spaced-apart idler rolls, wherein said web moves in said down-web direction while being maintained under a select tension of at least one pound of tension for each inch of said width of said web;

using a reflected light image capturing camera system to capture ~~capturing~~ reflected light from said source that is reflected by said select web portion and deriving a digital image of said reflected light;

simultaneously with said step of capturing reflected light, using a transmitted light image capturing camera system to capture ~~capturing~~ transmitted light from said source that is transmitted through said select web portion and deriving a digital image of said transmitted light;

wherein said light source and said reflected light image capturing system are located on a first side of said web and wherein said transmitted light image capturing system is located on a second side of said web that is opposite said first side so that said web passes between said light source and said transmitted light image capturing system;

wherein said light projected from said source is incident on said web at an angle of x degrees relative to a vertical plane,

said reflected light image capturing system is located at an angle y relative to said vertical plane, and wherein said transmitted light image capturing system is directly aligned with said projected light;

wherein said reflected light image capturing system comprises a plurality of reflected light imaging cameras with overlapping reflected light imaging fields in said cross-web direction that are registered with each other in said down-web direction, and wherein said transmitted light image capturing system comprises a plurality of transmitted light imaging cameras with overlapping transmitted light imaging fields in said cross-web direction that are registered with each other in said down-web direction, and wherein each of said reflected light imaging cameras corresponds to and is registered with one of said transmitted light imaging cameras so as to define a corresponding pair of imaging cameras located on opposite sides of said web;

digitally merging said reflected light digital image and said transmitted light digital image to derive merged image data that represent both said reflected light and said transmitted light; and,

using all of: (i) said reflected light digital image; (ii) said transmitted light digital image; and, (iii) said merged image data to identify defects in said web;

without interrupting movement of said web in said down-web direction, physically marking said web at or near all identified defects to define marked defects;

culling said marked defects from said web.

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)
6. (canceled)
7. (canceled)
8. (currently amended) The method as set forth in ~~claim 6~~
claim 1, wherein said light source comprises a fiber-optic light
line.

9. (original) The method as set forth in claim 8, wherein each of said reflected light cameras and each of said transmitted light cameras comprises a line-scan CCD camera.

10. (original) The method as set forth in claim 9, wherein said reflected light cameras are registered with each other in terms of a down-web portion of said web being imaged respectively thereby so that said reflected light imaging cameras cooperate to image a single uninterrupted $1 \times m$ pixel row of said web, where m is the resolution of pixels used to image an entire cross-web dimension of said web.

11. (original) The method as set forth in claim 10, wherein said transmitted light cameras are registered with each other in terms of a down-web portion of said web being imaged respectively thereby so that said transmitted light imaging cameras cooperate to image a single uninterrupted $1 \times m$ pixel row of said web, where m is the resolution of pixels used to image an entire cross-web dimension of said web.

12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)

17. (canceled)
18. (canceled)
19. (canceled)
20. (canceled)